carcinoma cell, wherein upon binding of the antibody to the carcinoma cell, the antibody is capable of being internalized within the cell.

46. The antibody of claim 45 wherein the antibody is capable of mediating antibody-dependent cellular cytotoxicity.

47. The antibody of claim 45 wherein the antibody is capable of mediating complement dependent cytotoxicity.

48. An antibody comprising an immunoglobulin or antigen-binding fragment thereof that competitively inhibits the binding of the antibody according to claim 45 to a Lewis Y cell membrane antigen of a carcinoma cell.

49. The antibody of claim 45 that comprises a polyclonal antibody.

50. The antibody of claim 45 that comprises a monoclonal antibody.

51. The antibody of claim 45, comprising an immunoglobulin antigen-binding fragment selected from the group consisting of $F(ab')_2$, Fab', Fab, and Fv.

52. The antibody of claim 45, comprising an immunoglobulin variable region from one species and at least a portion of an immunoglobulin constant region from a second species or an antigen-binding fragment thereof.

53. The antibody of claim 52, wherein the immunoglobulin variable region is a murine immunoglobulin variable region and the immunoglobulin constant region is a human constant region.

54. The antibody of claim 52, comprising an immunoglobulin antigen-binding fragment selected from the group consisting of $F(ab')_2$, Fab', Fab, and Fv.

55. A eukaryotic cell line that expresses the antibody of any one of claims 50 or 52.

56. The antibody of claim 45 wherein the Lewis Y cell membrane antigen comprises a fucosylated variant of a Lewis Y antigen.

57. The antibody of claim 56 wherein the fucosylated variant of a Lewis Y antigen is selected from the group consisting of a Lewis Y glycolipid, a Lewis Y glycoprotein, and a LNF III glycoprotein.

58. The antibody of claim 45 wherein the carcinoma cell is selected from the group consisting of a breast carcinoma cell, a colon carcinoma cell, a lung carcinoma cell, and an ovary carcinoma cell.

59. An immunoconjugate that comprises the antibody of claim 45 joined to a therapeutic agent.

60. The immunoconjugate of claim 59 wherein the therapeutic agent is selected from the group consisting of a cytotoxin, an anti-tumor drug, a radioactive agent, a second antibody, and an enzyme.

61. The immunoconjugate of claim 60 wherein the cytotoxin is a ribosome binding toxin.

62. The immunoconjugate of claim 61 wherein the ribosome binding toxin is ricin A.

63. The immunoconjugate of claim 61 wherein the ribosome binding toxin is an exotoxin.

64. The immunoconjugate of claim 63 wherein the exotoxin is Pseudomonas exotoxin A.

65. The immunoconjugate of claim 63 wherein the exotoxin is truncated to remove the cell-binding domain.

66. An antibody of claim 45 that comprises a single chain antibody.

67. An immunoconjugate that comprises the antibody of claim 66 joined to a therapeutic agent.

68. The immunoconjugate of claim 67 wherein the therapeutic agent is an exotoxin.

69. The immunoconjugate of claim 68 wherein the exotoxin is Pseudomonas exotoxin.

70. The immunoconjugate of claim 68 wherein the exotoxin has been modified to remove the cell-binding domain.

71. The immunoconjugate of claim 63 wherein the amino terminus of the exotoxin has been modified to include a lysine amino acid residue.

72. A recombinant single-chain immunotoxin molecule comprising a cloned heavy chain Fv portion and a cloned light chain Fv portion of the antibody of claim 45 joined to a cytotoxic agent.

73. The immunotoxin molecule of claim 72 wherein the cytotoxic agent is an exotoxin.

74. The immunotoxin molecule of claim 73 wherein the exotoxin is Pseudomonas exotoxin A.

75. The immunotoxin molecule of claim 73 wherein the exotoxin has been modified to remove the cell-binding domain.

B1 Cont.

76. A bifunctional antibody comprising an immunoglobulin with two different binding specificities: (1) wherein one arm of the antibody binds specifically to the same antigenic site on the Lewis Y membrane antigen of the carcinoma cell to which the antibody of claim 45 binds, and (2) the second arm of the antibody binds specifically to a second antigenic site.

77. The bifunctional antibody of claim 76 wherein the second antigenic site is a different epitope on the Lewis Y cell membrane antigen than that to which the antibody of claim 45 specifically binds.

78. The bifunctional antibody of claim 76 wherein the second antigenic site is a tumor-associated cell antigen other than the Lewis Y cell membrane antigen to which the antibody of claim 45 specifically binds.

79. The bifunctional antibody of claim 76 wherein the second antigenic site is a hapten that is an agent lethal to the carcinoma cell or is a hapten that is bound to an agent lethal to the carcinoma cell.

80. The bifunctional antibody of claim 79 wherein the agent lethal to the carcinoma cell is selected from the group consisting of an anti-tumor drug, a cytotoxic agent, and a radioactive agent.

81. A method for selectively killing a tumor cell that expresses the Lewis Y membrane antigen to which the antibody of claim 45 specifically binds, comprising reacting the antibody of claim 45 with the tumor cell.

82. A method for selectively killing a tumor cell that expresses the Lewis Y membrane antigen to which the antibody of claim 45 specifically binds, comprising reacting the immunoconjugate of claim 59 with the tumor cell.

83. A method for treating a subject suffering from a malignant disease characterized by cells having the Lewis Y cell membrane antigen to which the antibody of claim 45 binds, comprising administering to the subject an effective amount of the antibody of claim 45 such that the antibody binds to the Lewis Y cell membrane antigen and kills the cells, thereby treating the subject.

84. A method for treating a subject suffering from a malignant disease characterized by cells having the Lewis Y cell membrane antigen to which the antibody of claim 45 binds, comprising administering to the subject an effective amount of the immunoconjugate of claim 59 such that the immunoconjugate binds to the Lewis Y cell membrane antigen and kills the cells, thereby treating the subject.

85. A pharmaceutical composition comprising a pharmaceutically effective amount of the antibody of claim 45 and a pharmaceutically acceptable carrier.

86. A pharmaceutical composition comprising a pharmaceutically effective amount of the immunoconjugate of claim 59 and a pharmaceutically acceptable carrier.

87. A method for selectively killing a tumor cell that expresses the Lewis Y membrane antigen to which the antibody of claim 45 binds, comprising

contacting the tumor cell with an amount of the immunotoxin molecule of claim 72 that effectively kills the tumor cell.

88. A method for selectively killing a tumor cell that expresses the Lewis Y membrane antigen to which the antibody of claim 45 binds, comprising contacting the tumor cell with an amount of the immunotoxin molecule of claim 72 for a sufficient time to kill the tumor cell.

89. A single chain immunoconjugate comprising an Fv fragment of the antibody of claim 45 joined to Pseudomonas exotoxin A.

90. A method for imaging a carcinoma cell that expresses the Lewis Y membrane antigen to which the antibody of claim 45 binds, comprising intravenously administering to a patient the antibody of claim 45 in an amount effective for detection of the carcinoma cell, allowing the antibody to localize to the site of the carcinoma cell and to bind to the carcinoma cell, and then detecting the antibody bound to the carcinoma cell.

91. The method of claim 90, wherein the antibody of claim 45 is covalently bound to a detectable moiety.

92. The method of claim 91, wherein the detectable moiety is selected from the group consisting of a radiolabel, an enzyme, a chromophore, and a fluorescer.--